PTO/SB/21 (05-03) Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Application Number 10/737,364 TRANSMITTAL Filing Date December 15, 2003 FORM First Named Inventor Youngwoo Kwon Art Unit Unknown (to be used for all correspondence after initial filing) Examiner Name Unknown Attorney Docket Number **PA2589US** 11 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Group Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to Group Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Proprietary Information After Final **Provisional Application** Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please X Terminal Disclaimer Extension of Time Request Identify below): (1) Confirmation Postcard; (2) PTO-SB-08 (x2); (3) List of Co-Pending Patent Applications (x2); (4) 6 Cited References; Request for Refund Express Abandonment Request (5) 2 Co-Pending Patent Applications; (6) Duplicate of Information Disclosure Statement CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Document(s) Total page number does not include postcard, cited references or co-pending patent applications. Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Individual name Carr & Ferrell LLP Cust. No. 22830 Signature Reg. No. 51,755 Date CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name John C. Grieger, Reg. No. 51,755 Date April 8, 2004 Signature

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/737,364

Filing Date December 15, 2003

First Named Inventor Youngwoo Kwon

Art Unit Unknown

Examiner Name Unknown

Attorney Docket Number PA2589US

(Use as many sheets as necessary)

Sheet 1 of 2 Attorney Docket Number PA2589US

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		us- 2,210,028	08-06-1940	Doherty	
		^{US-} 4,335,363	06-15-1982	Bowers	
		^{US-} 5,420,541	05-30-1995	Upton et al.	
		us- 5,568,086	10-22-1996	Schuss et al.	
		^{US-} 5,786,727	07-28-1998	Sigmon	
		^{US-} 5,880,633	03-09-1999	Leizerovich et al.	
		us- 6,374,092 B1	04-16-2002	Leizerovich et al.	
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	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ^{3 ·} Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵		
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Signature	Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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2 of 2

Complete if Known				
Application Number	10/737,364			
Filing Date	December 15, 2003			
First Named Inventor	Youngwoo Kwon			
Art Unit	Unknown			
Examiner Name	Unknown			
Attorney Docket Number	PA2589US			

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
		RAAB, F.H., "Efficiency of Doherty RF Power-Amplifier Systems," IEEE Transactions On Broadcasting, September 1987, pp. 77-83, Vol. BC-33.		
		IWAMOTO, M., et al., "An Extended Doherty Amplifier with High Efficiency Over a Wide Power Range," IEEE Transactions On Microwave Theory and Techniques, December 2001, pp. 2472-2479, Vol. 49, No. 12.		
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		WALLACE, L., "Amplifier Linearization Promotes Efficiency in Multi-Carrier WCDMA Basestation," EE Times, October 18, 2002, at http://www.eetimes.com/story/OEG20021018S0059.		

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Examiner		Date	
Signature		Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/737,364

Filing Date December 15, 2003

First Named Inventor Youngwoo Kwon

Art Unit Unknown

Examiner Name Unknown

Attorney Docket Number PA2589US

(Use as many sheets as necessary)
Sheet 1 of 2 Attorney Docket Number PA2589US

U. S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.¹	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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	FOREIGN PATENT DOCUMENTS						
	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages		
Initials*	No.¹	Country Code ³ Number ⁴ Kind Code ⁵ (if known)		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	r T°	

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Examiner	Date
Signature	Considered

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

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Complete if Known				
Application Number	10/737,364			
Filing Date	December 15, 2003			
First Named Inventor	Youngwoo Kwon			
Art Unit	Unknown			
Examiner Name	Unknown			
Attorney Docket Number	PA2589US			

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²	
		RAAB, F.H., "Efficiency of Doherty RF Power-Amplifier Systems," IEEE Transactions On Broadcasting, September 1987, pp. 77-83, Vol. BC-33.		
		IWAMOTO, M., et al., "An Extended Doherty Amplifier with High Efficiency Over a Wide Power Range," IEEE Transactions On Microwave Theory and Techniques, December 2001, pp. 2472-2479, Vol. 49, No. 12.		
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\$	•	LEES, J., et al. "Single-Tone Optimisation of an Adaptive-Bias Doherty Structure," 2003 IEEE MTT-S Digest, 2003, pp. 2213-2216, IEEE.		
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IN THE

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Youngwoo Kwon et al.

SERIAL NO.:

10/737,364

FILED:

December 15, 2003

TITLE:

High Linearity Doherty Communication Amplifier with

Phase Control

EXAMINER:

Unknown

GROUP ART UNIT:

Unknown

ATTY.DKT.NO.:

PA2589US

COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT Under 37 C.F.R. §§ 1.56, and 1.97-1.98

SIR:

Pursuant to the provisions of 37 C.F.R. §§ 1.56 and 1.97-98 of the Rules of Practice in Patent Cases, enclosed herewith is form PTO-SB-08 and a List of Co-Pending Patent Applications, each listing several references. Copies of the cited nonpatent literature and the co-pending applications, except for the co-pending parent application (U.S. Application No. 10/432,553, filed May 21, 2003), are enclosed. The Examiner is requested to make these references of official record in the application. The references cited may be material to examination of the application and are submitted in compliance with Applicant(s)'s duty of disclosure as defined by 37 C.F.R. § 1.56.

No representation is made or intended as to the completeness of this list, nor is the inclusion of any reference on this list an admission that it is prior art or pertinent to this application.

Applicants believe no fee is due with this submission. If a fee is due, however, the Commissioner is hereby authorized to charge any necessary fee to Account Number 06-0600. A copy of this statement is submitted in duplicate for this purpose.

> Respectfully submitted, Youngwoo Kwon et al.

Dated: <u>April 8, 2004</u>

Carr & Ferrell LLP 2200 Geng Road Palo Alto, CA 94303

TEL: (650) 812-3400 FAX: (650) 812-3444

CERTIFICATE OF MAILING

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Dated: <u>April 8, 2004</u>

By: John C. Grieger, Reg. No. 51,755



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Youngwoo Kwon et al.

SERIAL NO.:

10/737,364

FILED:

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TITLE:

High Linearity Doherty Communication Amplifier with

Phase Control

EXAMINER:

Unknown

GROUP ART UNIT:

Unknown

ATTY.DKT.NO.:

PA2589US

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ALEXANDRIA, VA 22313-1450

<u>List of Co-Pending Patent Applications That May Be Directed</u> <u>Towards Similar Subject Matter</u>

Examiner's Initials	Serial Number	First-Named Inventor	Title	Filing Date
	10/505 454		High Linearity Doherty Communication Amplifier with Integrated Output Matching	
	10/737,476	Youngwoo Kwon	Unit	12/15/2003
			High Linearity Doherty Communication	
	10/690,923	Youngwoo Kwon	Amplifier with Bias Control	10/21/2003
	10/432,553	Youngwoo Kwon	Power Amplification Apparatus of Portable Terminal	05/21/2003
Examiner's Signature:				Date